

REMARKS

Applicants respectfully request reconsideration and allowance of the above-identified patent application. By this paper, claims 27-29 and 45-47 are pending, wherein claims 27, 29, 45, and 47 have been amended.¹

Initially Applicants note with appreciation the Examiner's withdrawal of the previous grounds of rejection in response to Applicants' Amendment "B" filed September 1, 2005. Applicants also note with appreciation the Examiner's consideration of the documents submitted in the supplemental Information Disclosure Statement (IDS) also filed September, 2005.

The Office Action objects to claims 45-47 under 37 C.F.R. § 1.126, which requires the original numbering of the claims be preserved throughout prosecution. As correctly noted by the Examiner, the previous correspondence with the U.S. Patent and Trademark Office mistakenly numbered these claims as 44-46. Accordingly, these claims have been appropriately numbered in this correspondence, as requested by the Examiner. Applicants, therefore, respectfully request withdrawal of this ground of objection.

The Office Action rejects claims 27-28 and 45 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,049,831 to Gardell et al. ("*Gardell*") in view of U.S. Patent No. 5,493,638 to Hooper et al. ("*Hooper*"). Further, the Office Action rejects claims 29 and 46-47 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,828,370 to Moeller et al. ("*Moller*"). Applicants respectfully traverse these grounds of rejection.²

Applicants' invention generally relates to a system wherein a client interactive TV system accesses and runs program(s) remotely at a server and wherein the server converts display commands generated from the program(s) into compressed video streams. As recited in independent claim 27, e.g., the system provides for a method for enabling a client to access TV channel programming via interaction with the one or more programs. The method allows a client interactive TV system to receive a first compressed video stream representing a WWW page that identifies TV channel(s), wherein the WWW page is converted to the first compressed video stream and transmitted to the interactive TV by a remote server. The client also receives as an overlay on the first compressed video stream, an additional compressed video stream that

¹ Support for the claim amendments can be found throughout the Specification, including ¶¶ [0114]-[0016].

² Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to do so in the future. Accordingly, any amendment or arguments made herein should not be construed as acquiescing to any prior art status or asserted teachings of the cited art.

includes at least one control corresponding to an interaction layer that allows for user input for modifying the first compressed video stream. The client interactive TV system then decompresses both the first and additional compressed video streams and displays the WWW page and the at least one control. Thereafter, the method detects an interaction of a user with the at least one control that indicates a selection of one of the identified one or more TV channels and provides the user interaction to the remote server, which converts the user interaction into a format that can be assimilated by the one or more programs running at the remote server. In response to the user interaction, the client interactive TV system receives and displays the selected one of the identified TV channels.

Similarly, Applicants' invention as recited for example in independent method claim 29 also relates to interactive TV system wherein a client system accesses and runs program(s) remotely at a server. The system provides a method for enabling a client to modify the compressed video streams. At a server that is remote from a client and that runs one or more programs for the client, the method provides a first compressed video stream representing a TV channel. The server then overlays on the first compressed video stream a second compressed video stream representing an interaction layer that includes at least one control that corresponds to modifications that can be made to the first compressed video stream. Note that the second compressed video stream is overlaid on the first compressed video stream without decompressing the first compressed video stream, wherein the TV channel and the at least one control are displayed at the client system upon the client system receiving and decompressing the first and second compressed video streams. Thereafter, input is received from a viewer comprising interaction with the at least one control, whereupon the input from the view is converted into a format that can be assimilated by the one or more programs running at the server. Upon conversion, at least the first compressed video stream is modified responsive to the received interaction by at least one of: changing a channel over which the client system receives compressed video and such that the client receives new compressed video, or providing the client access to a different set of P frames than were originally provided in the first compressed video stream.

With regard to claim 27, Applicants respectfully submit that the combination of *Gardell* and *Hooper* does not render this claim unpatentable for at least the reason that the Office Action

has not established a *prima facie* case of obviousness.³ In particular, Applicants respectfully submit there is improper motivation for combining the reference in the manner suggested by the Office Action and that the combination does not disclose or suggest each and every element of such claim.

First, with regard to the assertion that there is improper motivation for combining *Gardell* and *Hooper*, Applicants respectfully note that M.P.E.P. § 2143.01 citing *In re Mills*, 916 F.2d 680, 167 USPQ2d 1430 (Fed. Cir. 1990) states that “[t]he mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination.” (Emphasis added). Moreover, this cited section of the M.P.E.P. states that “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.”

Gardell discloses a system for transmitting network related information where requested network information is separately transmitted as definitions and display information. As acknowledged by the Office Action, col. 4, ll. 24-54, of *Gardell* states that pages are scanned for “interactive user interface elements,” wherein if they are found they are then striped out to create “HTML UI definitions.” (See, e.g., col. 4, ll. 24-27). The resulting “display signal” from the page that was stripped of the interactive elements is then translated into an MPEG I-Frame for transmission over a first path 138. (See, e.g., col. 4, ll. 49-53). The UI definitions, however, are translated to a different format for transmission over a separate path 134. *Id.* In other words, *Gardell* discloses sending interactive portions of a Web page over a transport stream different from the compressed video stream.

Applicants’ claimed invention, on the other hand, discloses that the interactive layer is compressed as an additional video stream and is overlaid on a first compressed video stream representing a WWW page. Because *Gardell* strips out the interactive elements and transmits them as HTML UI definitions on a separate path from the MPEG stream, *Gardell* actually

³ In order to establish a *prima facie* case of obviousness, “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” M.P.E.P. § 2143 (emphasis added). In addition, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. M.P.E.P. § 2143. During examination, the pending claims are given their broadest reasonable interpretation, i.e., they are interpreted as broadly as their terms reasonably allow, consistent with the specification. M.P.E.P. §§ 2111 & 2111.01. Finally, Applicants note that M.P.E.P. § 2141.02 states that the cited references must be considered as a whole, including those sections that “teach away” from the claimed invention. (Citation omitted).

“teaches away” from Applicants’ claimed invention. Accordingly, *Gardell* should not be relied upon in combination with any other reference as allegedly rendering Applicants’ claimed invention unpatentable. Nevertheless, the Office Action combines *Gardell* with *Hooper* for allegedly disclosing portions of claim 27.

Hooper discloses a remote display of an image by transmitting compressed video frames representing background and overlay portions thereof. More specifically, *Hooper* discloses that background images are created and compressed as I-frames of an MPEG compression format. Unlike *Gardell*, however, *Hooper* further discloses that the interactive images that are overlaid on the background as part of the remote display image are created and encoded as MPEG P-frames, which are subsequently saved as an ordered list with the background I-frames to ensure correct reconstruction of the remote display image. *See, e.g., Hooper* col. 6, l. 54 - col. 7, l. 9. Accordingly, modifying *Gardell* with *Hooper* changes the principle of operation of *Gardell*, which is to strip out the interactive display elements and transmit them in a different format (i.e., HTML UI definitions) from MPEG compression over a separate path from the display page. In other words, transmitting interaction images in the same MPEG format and in the same stream as the background (as described in *Hooper*) “would [improperly] require a substantial reconstruction and redesign of the elements shown in [*Gardell*] as well as a change in the basic principle under which [*Gadells*] construction was designed to operate.” *In re Ratti*, 270 F.2d 810, 123 USPQ 349, 352 (CCPA 1959). For at least the forgoing reasons, such modification or combination is improper for establishing a *prima facie* case of obviousness.

Nevertheless, even if the modification or combination of *Gadell* and *Hooper* was proper, such combination does not disclose or suggest each and every element of claim 27. For example, the combination does not disclose or suggest, among other things, a first compressed video stream that has overlaid thereon additional compressed video data that includes at least one control corresponding to an interaction layer. As such, the combination of *Gardell* and *Hooper* cannot disclose or suggest a client interactive TV system that decompresses both the first and additional compressed video streams and displays the WWW page and the at least one control. Further, the combination does not disclose or suggest detecting an interaction of a user with the at least one control that indicates a selection of one of an identified one or more TV channels, and in response to the user interaction, receiving and displaying the selected one of the identified TV channels on the client interactive TV system, as recited, *inter alia*, in claim 27.

As previously mentioned, *Gardell* discloses a system for transmitting network related information where requested network information is separately transmitted as definitions and display information. Although *Gardell* discloses sending Web pages to a set top box by translating a portion of a page into an MPEG I-Frame for transfer over a first path 138, *Gardell* does not disclose that such MPEG stream has overlaid thereon an additional compressed video data stream associated with an interaction layer. In fact, as acknowledged by the Office Action, *Gardell* discloses that the interactive elements are transmitted as HTML UI definitions over a separate path as the video stream. Accordingly, *Gardell* cannot possibly disclose or suggest a first compressed video stream that has overlaid thereon an additional compressed video stream that includes at least one control corresponding to an interaction layer. Recognizing some of the deficiencies of *Gardell* the Office Action cites *Hooper*.

Also as previously state, *Hooper* discloses a remote display of an image by transmitting compressed video frames representing background and overlay portions thereof. Unlike Applicants' claimed invention, however, *Hooper* discloses that interactive images are created and encoded as MPEG P-frames, which are then saved as an ordered list with the background I-frames to ensure correct reconstruction of the remote display image. See e.g., col. 6, l. 54 - col. 7, l. 9 of *Hooper*. Because the frames for both the background and the interactive images are arranged in order as a single stream, *Hooper* cannot possibly disclose or suggest a first compressed video stream that has overlaid thereon an additional compressed video stream that includes at least one control corresponding to an interaction layer. As such, *Hooper* cannot overcome those deficiencies noted above with regard to *Gardell*.

For at least the foregoing reasons, Applicants respectfully submit that the Office Action has not established a *prima facie* case of obviousness with regards to claim 27. Accordingly, Applicants respectfully request withdrawal of rejection of claim 27 as allegedly unpatentable over the combination of *Gardell* and *Hooper*.

Regarding claim 29, Applicants respectfully submit that *Moeller* does not render this claim anticipated or otherwise unpatentable for at least the reason that *Moeller* does not disclose or enable each and every element of claim 29.⁴ For example, *Moeller* does not disclose or enable

⁴ "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131. That is, "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." M.P.E.P. § 706.02. Applicants also note that "[i]n determining that quantum of prior art disclosure which is necessary to

overlaying a first compressed video stream with a second compressed video stream representing an interaction layer that includes at least one control that corresponds to modifications that can be made to the first compressed video stream. Note that the second compressed video stream is overlaid on the first compressed video stream without decompressing the first compressed video stream. Accordingly, *Moeller* cannot possibly disclose or enable modifying at least the first compressed video stream responsive to received interaction of a user with the at least one control by at least one of: changing a channel over which the client system receives compressed video and such that the client receives new compressed video, or providing the client access to a different set of P frames than were originally provided in the first compressed video stream, as recited, *inter alia*, in claim 29.

Moeller discloses a video delivery system and method for displaying an indexing slider bar on the subscriber video screen. The slider bar icon displayed is used for interactively indexing different positions of a movie video stream. Although *Moeller* discloses transmitting the slider bar graphical icon in conjunction with the movie video stream being output, *Moeller* is silent with exactly how this transmission occurs. See, e.g., *Moeller* col. 7, ll. 58-61. More specifically, *Moeller* gives no indication as to whether or not such interactive slider bar is even converted to a compressed video stream. Nevertheless, even if *Moeller* implicitly discloses that the interactive slider bar is converted to a compressed video stream, *Moeller* would still be silent as to whether or not the compressed video stream for the slider bar is separate from the compressed video for the subscribed movie being displayed. As such, *Moeller* cannot possibly disclose or enable overlaying a first compressed video stream with a second compressed video stream representing an interaction layer that includes at least one control that corresponds to modifications that can be made to the first compressed video stream, the second compressed video stream being overlaid on the first compressed video stream without decompressing the first compressed video stream, as recited, *inter alia*, in claim 29.

declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure.'" M.P.E.P. § 2121.01. In other words, a cited reference must be enabled with respect to each claim limitation.

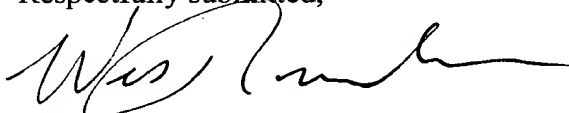
Because *Moeller* does not disclose or enable each and every element of claim 29, *Moeller* does not anticipate or otherwise render claim 29 unpatentable. Accordingly, Applicants respectfully request withdrawal of this ground of rejection.

Based on at least the foregoing reasons, therefore, Applicants respectfully submit that the cited art fails to anticipate or make obvious Applicants' invention, as claimed, for example, in independent claims 27 and 29. Applicants note for the record that the other rejections and assertions of record with respect to the independent and dependent claims are now moot, and therefore need not be addressed individually. Accordingly, Applicants do not acquiesce to any assertions in the Office Action that are not specifically addressed above, and hereby reserve the right to challenge those assertions in the future, including any official notice taken by the Examiner, if necessary or desired.

All objections and rejections having been addressed, Applicants respectfully submit that the present application is in condition for allowance, and notice to this effect is earnestly solicited. Should any question arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at +1.801.533.9800.

Dated this 21st day of December, 2005.

Respectfully submitted,



RICK D. NYDEGGER
Registration No. 28,651
WESLEY C. ROSANDER
Registration No. 51,030
Attorney for Applicant
Customer No. 047973